THE PROPRIETY OF, AND THE INDICATIONS FOR, THE RESECTION OF THE APPENDIX VERMIFORMIS DURING THE QUIESCENT STAGE OF CHRONIC RELAPSING APPENDICITIS.

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THE question of the propriety of operation during the quiescent stage of a chronic relapsing appendicitis, is one that has to be argued, after the manner of the old adage, of "Locking the stable after the horse has been stolen." In the discussion of the indication for early operation for appendicitis if the decision is reached, as I think it should be, that surgical interference, in the absence of general complications, in experienced hands is, or ought to be uniformly safe, we are, in this discussion, left to the consideration of a part of the subject of a condition that ought not to obtain at all, because the pathology that renders it possible ought not to exist. Dr. Fitz, in his classic paper of 1886, in the Transactions of American Physicians, says: "An additional argument against the plan of waiting with the hope of the occurrence of resolution, is to be found in the frequency of recurrent attacks." He then places the recurrence at 11%. The tables of Kraaft are double this, or 22%. Now when we consider the anatomy of the parts concerned in the occurrence of appendicitis it is evident that many so-called instances of the affection are not appendicitis at all, but are examples of simple inflammatory adhesion due to congestion from the extreme mobility and twisting of the colon under the several varieties of revolution in this special portion of the intestinal canal as demonstrated by Rokitansky. The per cent of

real recurrence must therefore be still greater. Now inflammations of this sort, like adhesive inflammations elsewhere in the intestinal tract, may cause inflammation and pain, though they are not appendicitis at all. Cases of appendicitis that get well without evidence of severe lesion, or any tendency to recur, are always open to the doubt of being appendicitis at all. The recurrent cases must be regarded as entirely typical of the disease, and the history of their complications that which should determine the question of our action or inaction in a condition which is often the most murderous of surgical affections.

That concretions may exist in the appendix without giving rise to serious trouble is no argument against the general rule that ordinarily they do cause suppuration. We have it stated by the opponents of operation in relapsing peritonitis that even in the event of perforation and the occurrence of general peritonitis recovery may occur without laparotomy. Such an argument certainly is without sufficient general applicability to merit its serious acceptance. On the same ground a city government might decide that inasmuch as small fires, even though allowed to spread, may yet be self limiting, and produce no damage which the municipality and the individal proprietor might not recover from, therefore that its fire department be not called out save in the event of a general conflagration. The surgery that waits for a general peritonitis before it interferes with a condition that may cause it or hesitates to operate upon a patient suffering from a general peritonitis because it *is possible for recovery without operation*, lends itself to a conspiracy both against the science of real surgery and against the sanctity of human life. It is the procrastination that is the thief of time, and against life, for that is the stuff that life is made of. It matters not that one or two or ten cases may be cited in which various pathological conditions of the appendix may be cited in which perforation has occurred without fatal termination. The expediency of operation must be tested, not by these but by the results of operations done for relapse and before its occurrence for primary disease, without serious complication. Operation done *in extremis* after numerous recurrences and in the pres-

ence of serious complications, or in extreme prostration, cannot be cited as arguments against the procedure because they fail to save life. They must rather be quoted against the delay that makes their necessity an opprobrium of surgery. Now granting that numerous cases in which suppuration occurs in chronic recurring appendicitis finally result in cure, can this be reasonably held as an argument against operation? I think not. We have to place against prompt surgical relief, before suppuration has taken place, the dangers of long continued suppurative processes, the details of which it is not necessary to recite. Suppurative destruction of any other abdominal or indeed of any organ are promptly dealt with. The surgeon who would allow a pleurisy to remain week after week until it had become purulent, before evacuating it, would scarcely expect to have his delay meet the approval of progressive physicians. An abscess of the liver must not be allowed to remain, nor that of the kidney nor that of the brain, and yet in all seriousness we are asked to consider that an abscess of the appendix if it is allowed to mature, *can sometimes be expected to proceed to favorable resolution; and that a peritonitis therefrom derived may sometimes fail to kill the patient;* and that therefore we need not always operate to relieve him. We would not use such logic in any business transaction. Is it fair to introduce such reasoning into practical surgery.

The most important paper of the past year so far as I have discovered is that of Dr. Dennis, of New York, who decides against the operation for the following reasons:

1. The danger to human life.
2. The difficulties of a positive diagnosis.
3. The development of ventral hernia.
4. The lack of conclusive evidence that excision of the appendix is attended with permanent relief.
5. The result of relapsing attacks may afford immunity from danger in the future.

I quote these conclusions as representing possibly all that the opponents of the operation can reasonably urge against it, in order briefly to consider the objections which it is evident are not manufactured for the sake of destroying, but which are put forth as a creed upon which to found a surgical faith,

which we are, I believe, justified in questioning before receiving it as orthodox. The danger to human life, it must be remembered, is increased by the logical antecedent of the ultimate proposition for delay. First we have it urged do not operate because only a minority of the cases recur, and most get well without operation; then we are urged in recurrence not to operate because few recurrences kill; finally we are advised there is no real need to operate even in peritonitis from recurrence, because peritonitis does not always kill. Such logic makes surgery as uncertain as the prophecies of the weather, and are as little to be relied upon. That an operation in order to be uniformly successful requires a refined technique, is no argument against the performance of that operation. In the best hands it is the opinion commonly received that operation for simple removal of the appendix is uniformly safe. In the existence of complications, the necessity for careful surgery with an abdominal experience is not to be overlooked. General surgeons with the idea that abdominal surgery needs no special care or special preparation, cannot fairly quote their results, if unsuccessful, against the adoption of the operation. All the complications liable to occur in this operation are just as liable to be met in other abdominal surgery, and the dangers of these diminishes as experience grows. The adhesions of an appendicitis cannot compare in complexity to those of an ectopic pregnancy, and yet who will advise this latter condition to be left to find its cure in suppuration? Positive diagnosis is not waited for in any other condition in which danger is imminent in the abdomen. A simple exploratory incision is not to be feared as fatal, and when it is so, there has been something wrong in the technique of the operator, something faulty in his idea of what constitutes simple exploration. If hernia is to be taken as an argument against the late operation for appendicitis, it is much rather to be taken as an argument against the delay which makes a late operation merit a serious consideration. In escaping one horn of the dilemma, we cannot find peace on the other. When we consider that the appendix in the great majority of cases is the seat of all inflammation at the head of the colon, the question of the value of its removal as a meas-

ure for permanent relief must be regarded more as technical or as critical, than as important. In any other region if we decide that there is a cause for a pathological condition, it is not questioned that this cause, if possible, should be removed. If the disease again recurs, other cause is to be sought. If the lesion is in the cæcum, it is folly to remove the appendix for that lesion. I am not sure that it would be bad surgery to remove it without cause present in order to escape a possible future contingency.

A final argument that relapsing attacks may afford immunity from future attacks might be adduced as a proof that operation in other conditions of pelvic peritonitis may not be necessary, because successive attacks may limit the territory of the disease, which may thus be said to burn itself out. All abdominal surgeons have met cases in which after protracted suffering with free discharge of pus, the patient after many years of delay reaches a condition of comparative comfort, in which it would be unwise to interfere. All this tends to the general criticism of general rules against a special operation, because in order to receive them as decisive they must lose all suspicion of special pleading.

The cases of Dr. Stimson published in the *N. Y. Med. Jour.*, Oct. 25, 1890, are worthy of a careful study as exhibiting the logic of the tactics variously proposed in the treatment of this condition. Of eight cases not operated upon, two, or 25% died; of three cases treated by the simple evacuation of pus all recovered; of ten cases in which the general peritoneal cavity was opened, two, or 20% died; of these latter one died in the second attack after operation, the other in the first. It is worthy of careful attention here that recurrence, as proven by Dr. Fitz' cases as recorded p. 40, Transactions of American Physicians, 1890, is 44%. In Dr. Bridge's paper in the same volume, the conclusion is reached that surgical interference is warranted in cases of undoubted appendicitis, even if no induration is present. In all of Dr. Fitz' cases, he gives his decision that in at least five-eighths, the treatment should have been surgical. If this is true of primary and relapsing cases in the aggregate, it would seem that of relapsing cases the number would be greater in which operation would be

justifiable. His ultimate conclusion that operation between attacks is to be advised if these are so frequent as to interfere with the enjoyment of life or prevent a living from being made seem to be a fair statement of the case. After all the argument points not so much to the immediate operation as to the early, and while no rule may be absolutely laid down which will dispose of every case, it may be urged as safe to resolve doubts by exploration, and in the event of a recurrent attack seen for the first time, to anticipate the possible, or probable results of delay, without waiting for further recurrence.